

HAND DELIVERED

FEB 25 2010

UTAH DIVISION OF  
SOLID & HAZARDOUS WASTE  
*2010.00900*

ANNUAL REPORTS  
For Calendar Year 2009

Class I Landfill  
and Composting Facility



Bountiful Sanitary Landfill  
Bountiful, Utah



# BOUNTIFUL

*City of Beautiful Homes and Gardens*

JOE L. JOHNSON  
MAYOR

CITY COUNCIL  
BETH HOLBROOK  
JOHN MARC KNIGHT  
R. FRED MOSS  
SCOTT C. MYERS  
TOM TOLMAN

HAND DELIVERED

February 24, 2010

FEB 25 2010

CITY MANAGER  
TOM HARDY

Dennis R. Downs, Director  
Division of Solid and Hazardous Waste  
P. O. Box 144880  
Salt Lake City, Utah 84114-4880

UTAH DIVISION OF  
SOLID & HAZARDOUS WASTE  
2010.00900

Subject: Solid Waste Landfill Annual Report (For Calendar Year 2008)  
Solid Waste Compost Facility Annual Report (For Calendar Year 2008)

Dear Mr. Downs

Enclosed are completed "Solid Waste Landfill Facility Annual Report" and "Solid Waste Compost Annual Report" forms for 2009 from the Bountiful Sanitary Landfill. The items listed under the "Other Required Reports" section of the landfill annual report are also contained.

The enclosures include the results of our 2009 landfill gas monitoring activities, training and certifications for facility personnel, and our most recent groundwater monitoring results. A statistical analysis report of the groundwater data is also included, which shows that arsenic exceeds the groundwater protection standard. We will soon propose a plan to demonstrate that the presence of arsenic down-gradient of the landfill is due to a source other than the landfill, such as a natural occurrence.

In the SOLID WASTE LANDFILL ANNUAL REPORT under the heading "Conversion Factor Used", we used a site-specific conversion factor for **residential** municipal waste being accepted. A typical pick-up truck load or a load on a single axle trailer is 0.4 tons. This is based on site specific averages calculated by weighing representative loads and determining that this conversion appropriately estimates the weight of the loads. The same procedure was used for a one ton truck (or double axle trailer) load. We use 0.6 tons for these loads. All other loads are weighed individually.

If you have any questions, or require additional information, please feel free to contact the Engineering Department.

Sincerely,  
BOUNTIFUL CITY ENGINEERING DEPT.

Todd Christensen, P.E.  
Staff Engineer

Enclosures as stated

# SOLID WASTE LANDFILL ANNUAL REPORT

For Calendar year 2009

## Administrative Information (Please enter all the information requested below - type or print legibly)

Facility Name: Bountiful Sanitary Landfill

Facility Mailing Address: 790 South 100 East

(Number & Street, Box and/or Route)

City: Bountiful

Zip Code: 84010

County: Davis

Permit No.: 9426R1

### Owner

Name: Bountiful City Corp. Phone No.: (801)298-6125

Mailing Address: 790 South 100 East

(Number & Street, Box and/or Route)

City: Bountiful

State: Utah

Zip Code: 84010

Contact's Name: Todd Christensen Title: Engineer

Contact's Mailing Address: 790 South 100 East

Phone No.: (801)298-6125

Contact's Email Address: toddc@bountifulutah.gov

### Operator (Complete this section only if the operator is not an employee of the Owner shown above)

Name: \_\_\_\_\_ Phone No.: ( ) \_\_\_\_\_

Mailing Address: \_\_\_\_\_

(Number & Street, Box and/or Route)

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Contact's Name: \_\_\_\_\_ Title: \_\_\_\_\_

Contact's Mailing Address: \_\_\_\_\_

Phone No.: ( ) \_\_\_\_\_

Contact's Email Address: \_\_\_\_\_

## Facility Type and Status

☒ Class I

☐ Class IIIb

☐ Class V

☐ Class II

☐ Class IVa

☐ Class VI

☐ Class IIIa

☐ Class IVb

Facility operates separate cells for C/D and municipal waste.

Yes ☐

No ☒

If facility was permanently closed during the year enter date closed: \_\_\_\_\_

## Annual Disposal

Total tons received at facility for disposal:

Waste Type	Waste Origin		Total	Measurement	
	In-State	Out-of-State		Tons	Cubic Yards
Municipal	<u>31,667</u>	<u>0</u>	<u>31,667</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Industrial	<u>0</u>	<u>0</u>	<u>0</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C/D <sup>1</sup>	<u>18,018</u>	<u>0</u>	<u>18,018</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<sup>1</sup>C/D waste includes all waste going to a Class IV or VI landfill cell

## Conversion Factor Used

☐ None ☐ From rules ☒ Site Specific Conversion (please list): 0.4 Tons for a pick-up truck load or a single axle trailer, 0.6 Tons for a one ton truck or a dual axle trailer load

## Recycling

Material Recycled: 663

Tons ☒ Cubic Yds. ☐

(Material recycled should not be included in disposed tons reported. Report compost on separate form. Circle tons or yards)

## Utah Disposal Fee

Disposal Fee Required to be Paid to State Yes ☒ No ☐ (If yes please show fees paid below)

Municipal	\$	C/D	\$
Industrial	\$	Annual	\$3,850.00

(Municipal, Industrial and C/D are fees paid by Commercial Facilities. Annual fee is paid by facilities operated by a municipality)

## Landfill Capacity

Current Landfill Remaining Capacity

Tons: \_\_\_\_\_

Cubic Yards: \_\_\_\_\_

Years: 40

Acres: \_\_\_\_\_

Acres Currently Open: 101

Acres Currently Closed: 0

## Financial Assurance

Current Closure Cost Estimate: \$ 1,038,165

Current Post-Closure Cost Estimate: \$ 888,800

Current Amount or Balance in Mechanism: \$ 2,018,761

(If facility permit has been renewed if balance does not equal or exceed total for closure and post-closure care please contact the Division)

Current Financial Assurance Mechanism: Trust Fund

(ie. Bond, Trust Fund, Corporate or government Test etc.)

Mechanism Holder and Account Number: PTIF Account No.: 0973

(ie. Name of Bond Company, Bank etc. Account number)

**Financial Assurance:** Each facility must recalculate the cost of closure and post-closure care to account for inflation and design changes each year. The inflation factor can be found on the Division web page. Facilities that are using a trust account should include a copy of the most recent account statement.

**Note** Facilities using "Local Government Financial Test" or the "Corporate Financial Test" must provide the information required in R315-309-8(4) or R315-309-9(3) each year.

## Other Reports and Information

**Ground Water Monitoring:** Class I and V landfills only. Check if exempt ☐

**Explosive Gas Monitoring:** Class I, II and V landfills only. Check if exempt ☐

**Training Report:** A report of all training programs or procedures completed by facility personnel during the year.

Does the facility have a landfill gas collection system Yes ☐ No ☒ If yes please briefly describe use of gas, e.g., flared or used for electricity generation.

**Signature:**

*Thomas R. Hardy*

**Date:** 2/24/10

Signature should be by an executive officer, general partner, proprietor, elected official, or a duly authorized representative. A duly authorized representative must meet the requirements of the solid waste rules (UAC R315-310-2(4)(d)).

Print name: Thomas R. Hardy

Title: City Manager

# SOLID WASTE COMPOST FACILITY ANNUAL REPORT

For Calendar year 2009

## Administrative Information (Please enter all the information requested below - type or print legibly)

Facility Name: Bountiful Sanitary Landfill

Facility Mailing Address: 790 South 100 East

(Number & Street, Box and/or Route)

City: Bountiful

Zip Code: 84010

County: Davis

### Owner

Name: Bountiful City Corp. Phone No.: (801)298-6125

Mailing Address: 790 South 100 East

(Number & Street, Box and/or Route)

City: Bountiful

State: Utah

Zip Code: 84010

Contact's Name: Todd Christensen Title: Engineer

Contact's Mailing Address: 790 South 100 East

Phone No.: (801)298-6125

Contact's Email Address: toddc@bountifulutah.gov

### Operator (Complete this section only if the operator is not an employee of the Owner shown above)

Name: \_\_\_\_\_ Phone No.: (\_\_\_\_)

Mailing Address: \_\_\_\_\_

(Number & Street, Box and/or Route)

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Contact's Name: \_\_\_\_\_ Title: \_\_\_\_\_

Contact's Mailing Address: \_\_\_\_\_

Phone No.: (\_\_\_\_)

Contact's Email Address: \_\_\_\_\_

## Facility Status

☒ Currently in Operation

☐ Closed - Date: \_\_\_\_\_

(The "Closed - Date" is the date that all material was removed from the site)

## Annual Totals

Waste received in reporting period: 7924

☒

Tons

☐

Cubic Yds

Product removed: 4123

☒

Tons

☐

Cubic Yds

Has facility operated according to approved plan of operation

☒

Yes

☐

No

If no please contact the Solid Waste Section at 801/538-6170

Signature: \_\_\_\_\_

Date: 2/24/10

Signature should be by an executive officer, general partner, proprietor, elected official, or a duly authorized representative. A duly authorized representative must meet the requirements of the solid waste rules (UAC R315-310-2(4)(d)).

Print name: Thomas R. Hardy

Title: City Manager

## 2009 Bountiful Sanitary Landfill Closure/Post Closure Cost Estimates

### Landfill Information

Description	Quantity	Units	
Total Permitted Area	100	acres	
Active Portion (Soil Lined)	50	acres	
Area of Largest Cell Requiring Final Cap	50	acres	
Perimeter Fencing	7600	linear feet	
Groundwater Monitoring Wells	327	VLF	
Average Daily Flow	120	tons/day	
Landfill Disposal Cost	25	\$/ton	
Price Adjustment	1.164		(Original Unit Costs are for end of 2004)

## Closure Cost Estimate

Task/Service	Quantity	Units	Multiplier	Unit Cost	Subtotal
Preliminary Site Work					
Conduct Site Evaluation	1	Lump Sum	1	\$2,892.19	\$3,366.53
Dispose Final Waste	120	tons/day	5	\$21.00	\$14,666.48
Remove Temporary Buildings	1	Lump Sum	1	\$2,577.12	\$2,999.78
Remove Equipment	1	Lump Sum	1	\$2,103.50	\$2,448.49
Repair/Replace Perimeter Fencing	7600	linear feet	0.25	\$2.32	\$5,130.94
Monitoring Equipment					
Rework/Replace Monitoring Wells	327	VLF	0.25	\$43.54	\$4,143.16
Plug Abandoned Monitoring Wells	327	VLF	0.25	\$18.67	\$1,776.59
Construction					
Complete Site Grading	50	acres	1	\$1,179.93	\$68,672.29
Construct/Compact Clay Final Cap	121000	cubic yards	1	\$3.36	\$473,238.37
Place On-Site Topsoil	100883	cubic yards	1	\$1.58	\$185,536.93
Establish Vegetative Cover	50	acres	1	\$421.11	\$24,508.73
<b>SUBTOTAL</b>					
<b>Administrative Services</b>	1	Lump Sum	0.1	\$675,673.62	\$78,648.83
<b>Technical and Professional Services</b>	1	Lump Sum	0.12	\$675,673.62	\$94,378.60
<b>Closure Contingency</b>	1	Lump Sum	0.1	\$675,673.62	\$78,648.83
<b>TOTAL FINAL CLOSURE</b>					<b>\$1,038,164.55</b>

## Post-Closure Cost Estimate

Task/Service	Quantity	Units	Multiplier	Unit Cost	Subtotal
Site Maintenance					
Site Inspections	4	per year	30	\$526.13	\$73,490.23
General Maintenance	1	per year	30	\$1,577.37	\$55,082.05
Monitoring Equipment					
Rework/Replace Monitoring Wells	327	VLF	0.25	\$43.54	\$4,143.16
Plug Abandoned Monitoring Wells	327	VLF	0.25	\$18.67	\$1,776.59
Final Plugging of Monitoring Wells	327	VLF	1	\$18.67	\$7,106.36
Final Plugging of Piezometers	300	VLF	1	\$14.73	\$5,143.74
Sampling and Analysis					
Groundwater Monitoring	30	Years	1	\$16,000.00	\$558,722.99
Final Cover Maintenance					
Repair Erosion, Settlement & Subsidence	100	acres	30	\$2.10	\$7,333.24
Reseed Vegetative Cover	100	acres	0.2	\$421.11	\$9,803.49
<b>SUBTOTAL</b>					<b>\$722,601.86</b>
<b>Administrative Services</b>	1	Lump Sum	0.06	\$620,788.66	\$43,356.11
<b>Technical and Professional Services</b>	1	Lump Sum	0.07	\$620,788.66	\$50,582.13
<b>Post-Closure Contingency</b>	1	Lump Sum	0.1	\$620,788.66	\$72,260.19
<b>TOTAL POST-CLOSURE</b>					<b>\$888,800.29</b>

**Total Closure plus Post Closure Estimate** **\$1,926,964.84**

## STATEMENT OF ACCOUNT

## PTIF

## UTAH PUBLIC TREASURERS' INVESTMENT FUND

Richard K. Ellis, Utah State Treasurer, Fund Manager

PO Box 142315

350 N State Street, Suite 180

Salt Lake City, Utah 84114-2315

Local Call (801) 538-1042 Toll Free (800) 395-7665

[www.treasurer.utah.gov](http://www.treasurer.utah.gov)

ESC-BOUNTIFUL CITY SAN LAND

MARK MCRAE

PO BOX 140102

SALT LAKE CITY UT 84114-0102

Account	Account Period
973	December 01, 2009 through December 31, 2009

Summary

Beginning Balance	\$ 2,017,688.89	Average Daily Balance	\$ 2,017,688.89
Deposits	\$ 1,072.02	Interest Earned	\$ 1,072.02
Withdrawals	\$ 0.00	360 Day Rate	0.6170
Ending Balance	\$ 2,018,760.91	365 Day Rate	0.6256

Date	Activity	Deposits	Withdrawals	Balance
12/01/2009	FORWARD BALANCE	\$ 0.00	\$ 0.00	\$ 2,017,688.89
12/31/2009	REINVESTMENT	\$ 1,072.02	\$ 0.00	\$ 2,018,760.91
12/31/2009	ENDING BALANCE	\$ 0.00	\$ 0.00	\$ 2,018,760.91

# Explosive Gas Monitoring



# BOUNTIFUL SANITARY LANDFILL

## METHANE GAS MONITORING

DATE: 1/15/09

*Shower Ground*  
30-35 *Calvin*

Location	METHANE CONCENTRATION (%)	PERCENT LOWER EXPLOSIVE LIMIT (%LEL)
Office_____	Ø	
Office <i>mens</i>	Ø	
Shop <i>N</i>	Ø	
Shop <i>S</i>	Ø	
Scale House	Ø	
North Boundary	Ø	
South Boundary	Ø	
East Boundary	Ø	
West Boundary	Ø	
Well DC-1	Ø	
Well DC-2	Ø	
Well DC-3	29.0	
Well DC-4	10.5	
Well JMM-1	Ø	
Well JMM-2	Ø	
Well JMM-3	Ø	
Well JMM-4	Ø	
Well JMM-5	Ø	
Well JMM-6	Ø	
Well JMM-7	Ø	
Well JMM-8	Ø	
Well BSL-1	N/A	
Well BSL-2		
Well BSL-3	<i>combinator changed inside to open gate</i>	

# BOUNTIFUL SANITARY LANDFILL

## QUARTERLY INSPECTION REPORT

DATE: 1/15/09

### Methane Monitoring System

Equipment Calibration	✓
Equipment Operation	✓
Other	

### Groundwater Monitoring System

Locks	✓
Protective Covers	✓
Guard Posts	✓
Other	

### Operations

Waste Placement and Compaction	✓
Litter Control	✓
Perimeter Fences	✓
Intermediate Cover	✓
Final Cover	✓

### Runoff Control and Retention

Berm Condition	✓
Transport Ditch Condition	✓
Topsoil and Vegetation condition	✓
Erosion Concerns	None
Other	✓

### Deviations from approved plan of operation


### Other Comments


# BOUNTIFUL SANITARY LANDFILL

## METHANE GAS MONITORING

DATE: 3-17-09

50° Sunny  
calm

Location	METHANE CONCENTRATION (%)	PERCENT LOWER EXPLOSIVE LIMIT (%LEL)
Office <u>m 6</u>	<u>- 0</u>	
Office <u>Breakroom</u>	<u>0</u>	
Shop <u>North Bay</u>	<u>0</u>	
Shop _____		
Scale House	<u>0</u>	
North Boundary	<u>0</u>	
South Boundary	<u>0</u>	
East Boundary	<u>0</u>	
West Boundary	<u>0</u>	
Well DC-1	<u>0</u>	
Well DC-2	<u>0</u>	
Well DC-3	<u>245</u>	
Well DC-4	<u>8.6</u>	
Well JMM-1	<u>0</u>	
Well JMM-2	<u>0</u>	
Well JMM-3	<u>0</u>	
Well JMM-4	<u>0</u>	
Well JMM-5	<u>0</u>	
Well JMM-6	<u>0</u>	
Well JMM-7	<u>0</u>	
Well JMM-8	<u>0</u>	
<del>Well BSL-1</del>	<del>NA 0</del>	
Well BSL-2	<u>0</u>	
Well BSL-3	<u>0</u>	

# BOUNTIFUL SANITARY LANDFILL

## QUARTERLY INSPECTION REPORT

DATE: 3-17-09

### Methane Monitoring System

Equipment Calibration	✓
Equipment Operation	✓
Other	

### Groundwater Monitoring System

Locks	✓
Protective Covers	✓
Guard Posts	✓
Other	

### Operations

Waste Placement and Compaction	✓
Litter Control	✓
Perimeter Fences	✓
Intermediate Cover	✓
Final Cover	✓

### Runoff Control and Retention

Berm Condition	✓
Transport Ditch Condition	✓
Topsoil and Vegetation condition	✓
Erosion Concerns	two places north end lot will recompact
Other	

### Deviations from approved plan of operation


### Other Comments


# BOUNTIFUL SANITARY LANDFILL

## METHANE GAS MONITORING

DATE: 4-13-09

Location	METHANE CONCENTRATION (%)	PERCENT LOWER EXPLOSIVE LIMIT (%LEL)
Office <u>Break Room</u>	0	
Office <u>W. Bathroom</u>	0	
Shop _____	0	
Shop _____	0	
Scale House	0	
North Boundary	0	
South Boundary	0	
East Boundary	0	
West Boundary	0	
Well DC-1	<del>0</del> .1	
Well DC-2	0	
Well DC-3	<del>0</del> 26	
Well DC-4	<del>0</del> 20.	
Well JMM-1	N/A	
Well JMM-2	0	
Well JMM-3	0	
Well JMM-4	N/A	
Well JMM-5	0	
Well JMM-6	0	
Well JMM-7	0	
Well JMM-8	0	
<del>Well BSL-1</del>	NA	
Well BSL-2	NA	
Well BSL-3	NA	

# BOUNTIFUL SANITARY LANDFILL

## QUARTERLY INSPECTION REPORT

DATE: 4-13-09

### Methane Monitoring System

Equipment Calibration	✓
Equipment Operation	✓
Other	

### Groundwater Monitoring System

Locks	✓
Protective Covers	✓
Guard Posts	✓
Other	

### Operations

Waste Placement and Compaction	
Litter Control	✓
Perimeter Fences	✓
Intermediate Cover	✓
Final Cover	✓

### Runoff Control and Retention

Berm Condition	✓
Transport Ditch Condition	✓
Topsoil and Vegetation condition	✓
Erosion Concerns	✓
Other	✓

### Deviations from approved plan of operation


### Other Comments


# BOUNTIFUL SANITARY LANDFILL

## METHANE GAS MONITORING

DATE: 05-04-09

Location	METHANE CONCENTRATION (%)	PERCENT LOWER EXPLOSIVE LIMIT (%LEL)
Office_____	0%	
Office_____	0%	
Shop_____	0%	
Shop_____	0%	
Scale House	0%	
North Boundary		
South Boundary		
East Boundary		
West Boundary		
Well DC-1	6.6%	
Well DC-2	0%	
Well DC-3	25%	
Well DC-4	20%	
Well JMM-1	0%	
Well JMM-2	0%	
Well JMM-3	0%	
Well JMM-4	Not accessible/debris water	
Well JMM-5		
Well JMM-6	0%	
Well JMM-7	1%	
Well JMM-8	0%	
<del>Well BSL-1</del>		
Well BSL-2	0%	
Well BSL-3	0%	

# BOUNTIFUL SANITARY LANDFILL

## QUARTERLY INSPECTION REPORT

DATE: \_\_\_\_\_

### Methane Monitoring System

Equipment Calibration	✓
Equipment Operation	✓
Other	

### Groundwater Monitoring System

Locks	JMM 5 needs replacing
Protective Covers	✓
Guard Posts	✓
Other	

### Operations

Waste Placement and Compaction	✓
Litter Control	✓
Perimeter Fences	✓
Intermediate Cover	✓
Final Cover	

### Runoff Control and Retention

Berm Condition	✓
Transport Ditch Condition	✓
Topsoil and Vegetation condition	✓
Erosion Concerns	✓
Other	

### Deviations from approved plan of operation

	None

### Other Comments




# BOUNTIFUL SANITARY LANDFILL

## METHANE GAS MONITORING

DATE: 06-09-09

Location	METHANE CONCENTRATION (%)	PERCENT LOWER EXPLOSIVE LIMIT (%LEL)
Office_____	0%	
Office_____	0%	
Shop_____	0%	
Shop_____	0%	
Scale House	0%	
North Boundary	0%	
South Boundary	0%	
East Boundary	0%	
West Boundary	0%	
Well DC-1	No access due to road on other repair (temporary)	
Well DC-2	0%	
Well DC-3	33.0%	
Well DC-4	26.5%	
Well JMM-1	0%	
Well JMM-2	0%	
Well JMM-3	0%	
Well JMM-4	(under water)	
Well JMM-5	0%	
Well JMM-6	2.3%	
Well JMM-7	0%	
Well JMM-8	0%	
Well BSL-1	(?)	
Well BSL-2	0%	
Well BSL-3	0%	

# BOUNTIFUL SANITARY LANDFILL

## QUARTERLY INSPECTION REPORT

DATE: \_\_\_\_\_

### Methane Monitoring System

Equipment Calibration	
Equipment Operation	
Other	

### Groundwater Monitoring System

Locks	
Protective Covers	
Guard Posts	
Other	

### Operations

Waste Placement and Compaction	
Litter Control	
Perimeter Fences	
Intermediate Cover	
Final Cover	

### Runoff Control and Retention

Berm Condition	
Transport Ditch Condition	
Topsoil and Vegetation condition	
Erosion Concerns	
Other	

### Deviations from approved plan of operation


### Other Comments


# BOUNTIFUL SANITARY LANDFILL

## METHANE GAS MONITORING

DATE: 07-06-09

*C/edry Sunny*

Location	METHANE CONCENTRATION (%)	PERCENT LOWER EXPLOSIVE LIMIT (%LEL)
Office_____		
Office_____	$\emptyset$	
Shop_____	$\emptyset$	
Shop_____	$\emptyset$	
Scale House	$\emptyset$	
North Boundary	$\emptyset$	
South Boundary	$\emptyset$	
East Boundary	$\emptyset$	
West Boundary	$\emptyset$	
Well DC-1	$\emptyset$	
Well DC-2	$\emptyset$	
Well DC-3	60.0	
Well DC-4	24.5	
Well JMM-1	$\emptyset$	
Well JMM-2	$\emptyset$	
Well JMM-3	$\emptyset$	
Well JMM-4	$\emptyset$	
Well JMM-5	$\emptyset$	
Well JMM-6	$\emptyset$	
Well JMM-7	$\emptyset$	
Well JMM-8	$\emptyset$	
Well BSL-1	$\emptyset$	
Well BSL-2	$\emptyset$	
Well BSL-3	$\emptyset$	

# BOUNTIFUL SANITARY LANDFILL

## QUARTERLY INSPECTION REPORT

DATE: 07-06-09

### Methane Monitoring System

Equipment Calibration	✓
Equipment Operation	✓
Other	✓

### Groundwater Monitoring System

Locks	✓
Protective Covers	✓
Guard Posts	✓
Other	✓

### Operations

Waste Placement and Compaction	✓
Litter Control	✓
Perimeter Fences	✓
Intermediate Cover	✓
Final Cover	✓

### Runoff Control and Retention

Berm Condition	✓
Transport Ditch Condition	✓
Topsoil and Vegetation condition	✓
Erosion Concerns	✓
Other	✓

### Deviations from approved plan of operation


### Other Comments


# BOUNTIFUL SANITARY LANDFILL

## METHANE GAS MONITORING

DATE: 08-24-09

*Supplies*

Location	METHANE CONCENTRATION (%)	PERCENT LOWER EXPLOSIVE LIMIT (%LEL)
Office_____	$\emptyset$	
Office_____	$\emptyset$	
Shop_____	$\emptyset$	
Shop_____	$\emptyset$	
Scale House	$\emptyset$	
North Boundary	$\emptyset$	
South Boundary	$\emptyset$	
East Boundary	$\emptyset$	
West Boundary	$\emptyset$	
Well DC-1	$\emptyset$	
Well DC-2	$\emptyset$	
Well DC-3	38.5	
Well DC-4	22.0	
Well JMM-1	$\emptyset$	
Well JMM-2	$\emptyset$	
Well JMM-3	$\emptyset$	
Well JMM-4		
Well JMM-5	$\emptyset$	
Well JMM-6	$\emptyset$	
Well JMM-7	15.3	
Well JMM-8	$\emptyset$	
Well BSL-1	X	
Well BSL-2	$\emptyset$	
Well BSL-3	$\emptyset$	

# BOUNTIFUL SANITARY LANDFILL

## QUARTERLY INSPECTION REPORT

DATE: 08-24-09

*duPort*

### Methane Monitoring System

Equipment Calibration	OK
Equipment Operation	OK
Other	

### Groundwater Monitoring System

Locks	OK
Protective Covers	OK
Guard Posts	OK
Other	

### Operations

Waste Placement and Compaction	OK
Litter Control	OK
Perimeter Fences	OK
Intermediate Cover	OK
Final Cover	OK

### Runoff Control and Retention

Berm Condition	OK
Transport Ditch Condition	OK
Topsoil and Vegetation condition	OK
Erosion Concerns	OK
Other	

### Deviations from approved plan of operation


### Other Comments


# BOUNTIFUL SANITARY LANDFILL

## METHANE GAS MONITORING

DATE: October 26, 2009

Location	METHANE CONCENTRATION (%)	PERCENT LOWER EXPLOSIVE LIMIT (%LEL)
Office_____	OK	
Office_____	OK	
Shop_____	OK	
Shop_____	OK	
Scale House	OK	
North Boundary	OK	
South Boundary	OK	
East Boundary	OK	
West Boundary	OK	
Well DC-1	Ø	
Well DC-2	Ø	
Well DC-3	36.0	
Well DC-4	9.2	
Well JMM-1	Ø	
Well JMM-2	Ø	
Well JMM-3	Ø	
Well JMM-4	27.5	
Well JMM-5	1.0	
Well JMM-6	1.0	
Well JMM-7	Ø	
Well JMM-8	Ø	
Well BSL-1	X	
Well BSL-2	Ø	
Well BSL-3	Ø	

# BOUNTIFUL SANITARY LANDFILL

## QUARTERLY INSPECTION REPORT

DATE: \_\_\_\_\_

### Methane Monitoring System

Equipment Calibration	
Equipment Operation	
Other	

### Groundwater Monitoring System

Locks	
Protective Covers	
Guard Posts	
Other	

### Operations

Waste Placement and Compaction	
Litter Control	
Perimeter Fences	
Intermediate Cover	
Final Cover	

### Runoff Control and Retention

Berm Condition	
Transport Ditch Condition	
Topsoil and Vegetation condition	
Erosion Concerns	
Other	

### Deviations from approved plan of operation


### Other Comments




# BOUNTIFUL SANITARY LANDFILL

## METHANE GAS MONITORING

DATE: Dec. 22, 2009

Location	METHANE CONCENTRATION (%)	PERCENT LOWER EXPLOSIVE LIMIT (%LEL)
Office_____	OK	
Office_____	OK	
Shop_____	OK	
Shop_____	OK	
Scale House	OK	
North Boundary	Ø	
South Boundary	Ø	
East Boundary	Ø	
West Boundary	Ø	
Well DC-1	Ø	
Well DC-2	Ø	
Well DC-3	22.5	
Well DC-4	8.2	
Well JMM-1	Ø	
Well JMM-2	Ø	
Well JMM-3	Ø	
Well JMM-4	26.0	
Well JMM-5	5.0	
Well JMM-6	<del>98.2</del> Ø	
Well JMM-7	Ø	
Well JMM-8	Ø	
Well BSL-1	X	
Well BSL-2	Ø	
Well BSL-3	Ø	

# BOUNTIFUL SANITARY LANDFILL

## QUARTERLY INSPECTION REPORT

DATE: \_\_\_\_\_

### Methane Monitoring System

Equipment Calibration	✓
Equipment Operation	✓
Other	

### Groundwater Monitoring System

Locks	✓
Protective Covers	✓
Guard Posts	✓
Other	Cast iron caps need space cleared for removal & replacement when testing

### Operations

Waste Placement and Compaction	✓
Litter Control	✓
Perimeter Fences	✓
Intermediate Cover	✓
Final Cover	✓

### Runoff Control and Retention

Berm Condition	Excellent !!
Transport Ditch Condition	✓
Topsoil and Vegetation condition	✓
Erosion Concerns	✓
Other	

### Deviations from approved plan of operation

	None

### Other Comments


# Training Report



**SWANA**<sup>®</sup>

SOLID WASTE ASSOCIATION  
of North America

## SWANA CERTIFIED PROFESSIONAL

This is to certify that

***Jim Wood***

has met the Solid Waste Association of North America's eligibility requirements  
and passed a comprehensive examination. Therefore SWANA hereby  
designates Jim Wood as a:

**Certified Landfill Manager**

As of 09/22/2004 until 09/22/2010

Certification No. 60517

John A. Skinner  
Executive Director and CEO



**SWANA**<sup>®</sup>  
SOLID WASTE ASSOCIATION  
of North America

## SWANA CERTIFIED PROFESSIONAL

This is to certify that

***Gary Blowers***

has met the Solid Waste Association of North America's eligibility requirements  
and passed a comprehensive examination. Therefore SWANA hereby  
designates Gary Blowers as a:

**Certified Landfill Manager**

As of 04/21/2005 until 04/21/2011

Certification No. 81500

John A. Skinner  
Executive Director and CEO



**SWANA**

SOLID WASTE ASSOCIATION  
of North America

**SWANA CERTIFIED PROFESSIONAL**

This is to certify that

***Todd Christensen***

has met the Solid Waste Association of North America's eligibility requirements  
and passed a comprehensive examination. Therefore SWANA hereby  
designates Todd Christensen as a:

**Certified Landfill Technical Associate**

As of 02/16/2006 until 02/16/2009

SOLID WASTE ASSOCIATION  
Certification No. 83395

John A. Skinner  
Executive Director and CEO



# SWANA CERTIFICATION PROGRAM

Continuing Education Unit (CEU) Report Form

**WASTECON 2008** • Tampa, Florida • October 19-23, 2008

**FAXED**  
11/5/08

NAME Todd Christensen SWANA MEMBER ID 83395  
ORGANIZATION Bountiful City  
ADDRESS 790 S 100 E  
CITY Bountiful STATE/PROVINCE UT ZIP CODE 84010  
PHONE 801 298-6125 FAX 801 298-6033 E-MAIL toddc@bountiful.utah.gov

Current Certifications Held: ☐ Bioreactor ☒ Landfill ☐ Recycling ☐ Composting  
☐ Collection ☐ Transfer Station ☐ Construction & Demolition ☐ MSW Systems

**This form may only be signed by a representative of this course/seminar/symposium.**

Obtain a signature for each session you attend by a course/seminar/symposium representative at the end of the course. The signature is **MANDATORY** and affirms the attendance of the session(s) as applicable.

**Must attend the entire day to receive contact hours!**

Instructor/  
Staff  
Initials

	COLL	COMP	C&D	LF	MSW	RECYC	TS	BIO	
Manager of Bioreactor Landfills	10	10	10	20	15	10	10	20	
Management of Landfill Operations (MOLO)	10	10	10	30	10	10	10	15	
Managing Construction and Demolition Materials	10	10	30	15	10	10	15	15	
Managing MSW Transfer Stations	10	10	10	10	10	10	30	10	
Principles of Management in MSW Systems	10	10	10	10	30	10	10	10	
Managing MSW Collection Systems	30	10	10	10	10	15	10	10	
Managing Composting Programs	10	30	10	10	10	15	10	10	
HHW & CESQG Facility Operations	15	15	15	15	15	15	15	15	
Landfill Gas System Operation and Maintenance	5	5	20	20	5	5	5	10	
Renewable Energy Credits and Greenhouse Gas Offsets 101	5 CEUs--Available for ALL Certification								
	5 CEUs--Available for ALL Certification								
Tuesday Conf. Session	5 CEUs--Available for ALL Certification								TDC
Wed. Conf. Sessions	5 CEUs--Available for ALL Certification								TC
Thursday Conference Sessions	5 CEUs--Available for ALL Certification								
Facility Tours	5 CEUs--Available for ALL Certification								

Mail or fax this completed form to the Certification Coordinator at P.O. Box 7219, Silver Spring, Maryland 20907-7219; fax (301) 589-7068. If you have any questions, please call **1-800 GO SWANA** or email [cert@swana.org](mailto:cert@swana.org). Visit our homepage at [www.SWANA.org](http://www.SWANA.org).

### IMPORTANT - PLEASE READ

You may apply for recertification upon completion of your 30 hours of continuing education. In order to recertify you will need to fill out a recertification application and submit it along with a recertification fee of \$200 to SWANA. To have a copy of the recertification application sent to you, please call **1-800 GO SWANA**.

# Landfill SWPPP Employee Training

Nov 3, 2009

## IN ATTENDANCE

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*Todd Christensen*

## AGENDA

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Item #1 Regulations Review

Item #2 Bountiful Sanitary Landfill SWPPP  
*Pollution Prevention Team*

Item #2a Spill Response  
*See SWPPP Pg 16*

Item #2b Inspections  
Especially critical when near outfall  
Equipment OK - Maintenance, Service, Inspected

Item #2c Monitoring  
Visual Monitoring - Process & Requirements  
Analytical Monitoring - Process & Requirements  
Most recent results

Benchmark      Iron = 1.0 mg/L    TSS = 100 mg/L    Description

3/26/09 Iron = 3.2 mg/L    TSS = 20 mg/L    Light Tan; Hardly Perceptible; Translucent

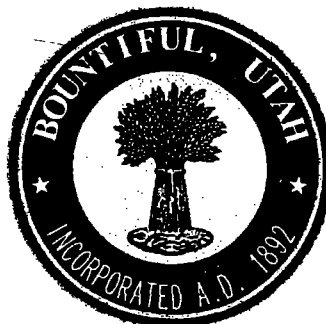
4/15/09 Iron = 7.6 mg/L    TSS = 210 mg/L    Tan; Hardly Perceptible; Slight Translucent

9/30/09 Iron = 6.6 mg/L    TSS = 170 mg/L    ? Light Brown, Hardly Perceptible, Slightly Translucent

Item #3 Record Keeping

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*John McEwen*  
*Lois Calener*  
*Jim Wood*  
*Don Porter*  
*Gary Brower*





Notes for Training:

Bring (and review) SWPPP

Pollution Prevention Team  
Manager

- Maintenance/Repairs
- Oversight
- Provide Resources

Environmental Compliance

- Spill Follow-up
- Update SWPPP
- Site Compliance Evaluation
- Training

Foreman

- On-Going Activities
- Monthly Inspections
- Quarterly Monitoring
  - Visual (Every Year)
  - Analytical (Calendar Years 2009, 2011)

{There is overlap for Monitoring Ongoing Activities, Verifying ability to channel stormwater, Emergency Response}

Liquid Spills (non-hazardous)  
5 gallon reportable limit

Hazardous Spills or Dumping - Any Quantity  
Do Not Handle!  
Report Immediately  
Do not let driver leave

{These are according to hazardous waste exclusion and reporting plans}

If showing segments of *Municipal Storm Watch* video...

See the "Municipal Storm Watch DVD contents.doc" which has a checklist chart